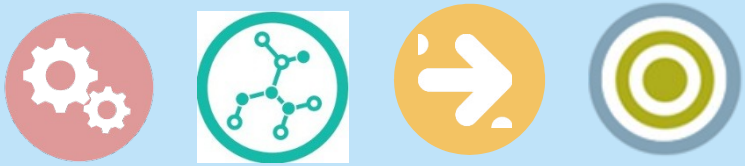
Secure Costal Ecosystems, Secure Communities in Tsunami-Affected Areas



Benjamas Chotthong
Thailand Environment Institute

INTERNATIONAL CONFERENCE ON SUSTAINABLE MANGROVE ECOSYSTEMS: MANAGING A VITAL RESOURCE FOR ACHIEVING THE SDGS AND THE PARIS AGREEMENT, 18-21 April 2017, Bali, Indonesia

Presentation issues:

1. Thailand's policies on coastal resources management

2. Experiences on mangrove rehabilitation in Thailand's Tsunami-affected areas

3. Drivers and incentives to mangrove sustainable management in Thailand

4. Key findings

Thailand's policies on coastal resources management

Former Constitution: promoted local right and public participation in natural resources management

1992

7th National Development Plan: determined mangrove area as one of the national development target

1999

Community Forestry Regulation: formally accept community's role in forest management

Coastal Resources Management Act: set up management committee at national and provincial levels

2012

11th-12th National Development Plan: target to enhance biodiversity and increase mangrove area 800 ha per year

2016

2017 Constitution: confirm community's role in mangrove forest management

2017

Current government strategies: drive Thailand 4.0 through digital, creative and biological economy

Key government organizations relate to coastal resources management

Ministry of Natural Resources and Environment

- **Department of Marine and Coastal Resources:** protect, recover, build public awareness, conduct research, develop data base,
- **Department of National Park, Wildlife and Plants:** declare protected area
- **Royal Forest Department:** community forestry
- **Office of Natural and Environmental Plan:** Ramsar site, CBD, EIA, climate change plan

Ministry of Agriculture and Cooperatives

- **Department of Fishery:** fishing gears, fishing production and marine products

Ministry of Interior

- **Department of Lands:** land right, mapping

Other ministries

- Tourism, pier, mining, industry, disaster, pollution, education, etc.

Strong mobilizations

Coastal land encroachment by tourism activities and palm oil plantation

Widely supporting the mangrove rehabilitation after 2004 Tsunami

CSR's planting activities by private sector

Reforestation project to commemorate His Majesty King Phumibol and Her Majesty Queen Sirikit

Plant genetic conservation project according to Princess Sirindhorn's initiative

Returning to the forest strategy

Experiences on mangrove rehabilitation in Thailand's Tsunami-affected areas

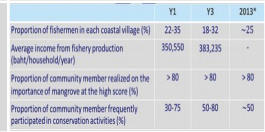
based on the project initiated by Royal Forest Department incorporated with Thailand Environment Institute, and supported by ITTO to rehabilitate coastal forests and promote community-based coastal resource management approaches to sustainable livelihoods and ecological security (CBM-SLES) in the 3 sub-districts between 2008-2012.

PD372/05
Rev.1 (F)

Project Outputs

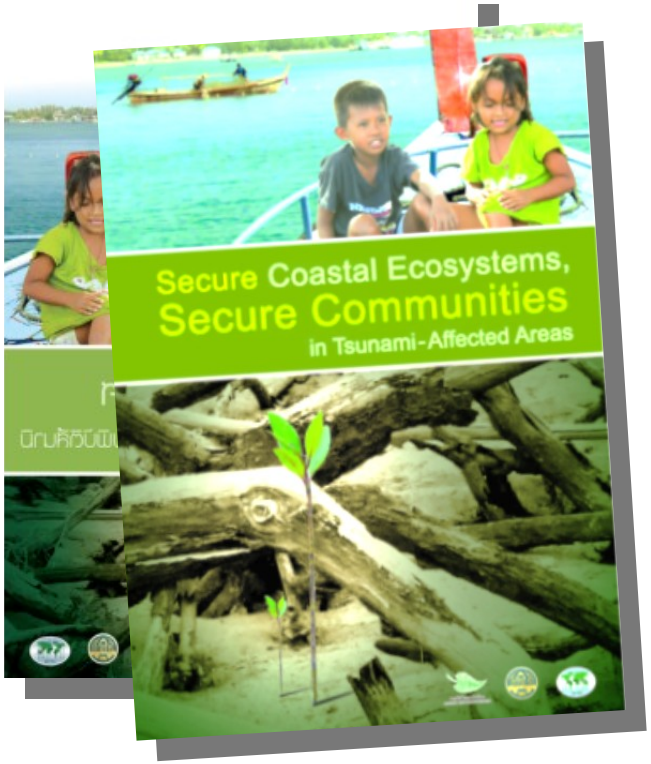
- 750 ha of destroyed coastal forests rehabilitated
- Awareness raising activities implemented
- Two Pilot CBM-SLES plans developed
- Monitoring program developed

Outputs	Project period			Extension period	Total (2012)	2013*
	Y1	Y2	Y3			
No. of activity	-	41	39	38	118	12
No. of seedling/pod						
- mangrove forest	-	136,900	126,200	128,500	391,600	41,600
- terrestrial/beach forests	-	34,400	7,250	7,080	48,730	5,000
No. of participant	-	2,586	2,154	2,953	7,693	8,113
Replanting area (ha)	-	260.26	254.02	237.44	**752**	5
Community forests area (ha)	-	1,242	2,212	234	**3,688**	-
No. of CBM-SLES plan	-	-	2	-	2	-

	Y1	Y3	2013*
Proportion of fishermen in each coastal village (%)	22-35	18-32	
Average income from fishery production (baht/household/year)	350,550	383,235	-
Proportion of community member realized on the importance of mangrove at the high score (%)	> 80	> 80	> 80
Proportion of community member frequently participated in conservation activities (%)	30-75	50-80	

* Data gathered from local governments in 2013

Outputs



Secure coastal ecosystems, secure communities in the Tsunami-affected areas (English/Thai)

Leaflet for data dissemination of bamboo and Nipa palm (in Thai only)

Two CBM-SLES plans (in Thai only)

TNA report and training programs

(English/Thai)

Project summary report (English/Thai)

The process began with a combination of local knowledge and technical knowledge, well cooperation among local stakeholders and integrated coastal resources management plan which focused on rehabilitation, long-term utilization, network and capacity development.








Replanting with selected species as indigenous species for each site and purpose of replanting; reduce impact of wave/wind, reduce coastal erosion, utilization, enrich ecosystem, landscaping, and demarcation.

Mostly men involved in brainstorming and planning , while women and youth played important role in actions

Forest restoration/rehabilitation should be taken in the late of recovery stage to mitigation stage of DRM cycle for maximizing local stakeholder's participation

Outcomes:

- **Appropriate process** led to community's sense of belonging, continuously actions, holistically link upstream to downstream, powerful next generation and active networking
- **Complete outputs** led to healthy mangrove ecology which provide foods, generate income, live safely, etc.

Drivers and incentives to mangrove sustainable management in Thailand

- **Data and maps** are effective materials for communication and planning
- **Community's realization** on benefits of coastal forest such as direct uses, mitigate the impact of wave/ wind, protect shore erosion, etc
- **Continuing consultation process** in community and with local stakeholders in term of informal and formal actions
- **Learning/sharing** experiences with wider stakeholders and foreign visitors

- **Socio-economic incentive** through high value of biological-based products (the later project funded by UNDP/GEF)
- **Balancing of gender and diverse generation** including teamwork building and avoiding a power of single leader
- **Mechanisms for long-term management** such as registration of community forest, setting up a regulation for optimal resources utilization, preservative zoning and conservative funding
- **Faith and mental values** to Thai monarchy and religion drive community to organize regularly planting and conservative activities

Key findings

- Coastal forest rehabilitation in the disaster-affected areas to secure coastal ecosystems and communities needs;
  - **Reclamation** - planting to establish tree cover on damaged areas aimed at establishing forest condition and protecting against land encroachment
  - **Restoration** - enrichment planting to increase diversity of aquatic plant and animal species, aimed to creating a forest barrier against disaster and supporting community's benefits
- Coastal resources management can balance the preservation with utilization in community level by the following steps;
  coastal area zoning -> **optimizing use** -> **eco-friendly production process** -> **high value products** -> **sharing benefits to maintain resources.**

THANK YOU

TEI THAILAND ENVIRONMENT INSTITUTE